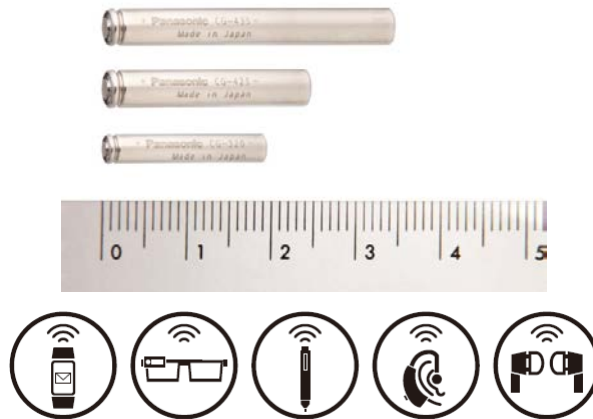


## Pin-type Lithium-ion Battery



Sep. , 2018

**Energy Device Business Division**  
**Automotive & Industrial Systems Company**  
**Panasonic Corporation**

Please  
access our  
website.



# Pin-type Lithium-ion Battery, suitable for small devices

Wireless Earphones



Hearing Aids



Smart Glasses

Stylus Pen



Wristband Devices



# Features

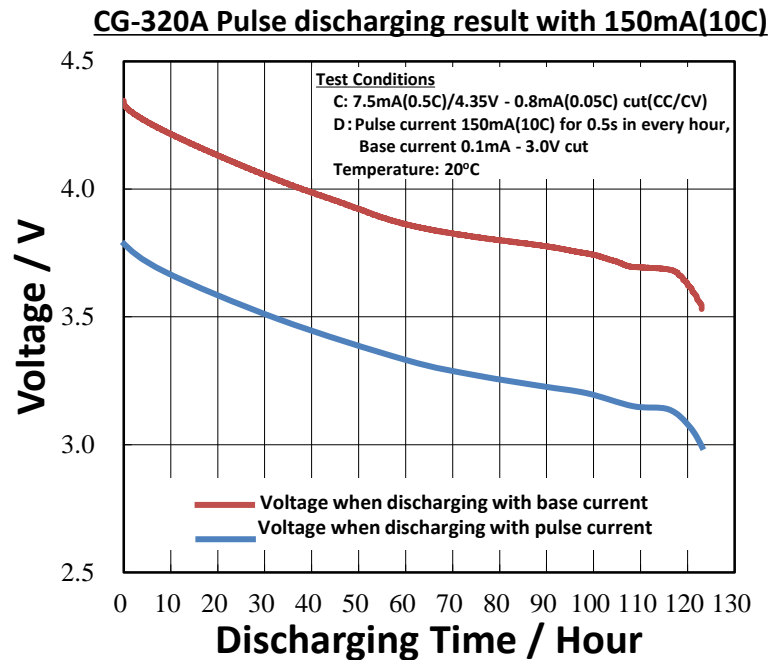
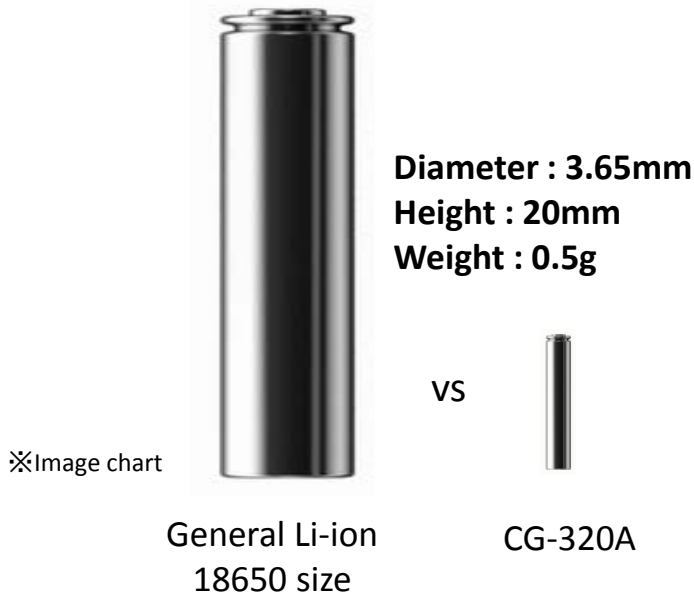
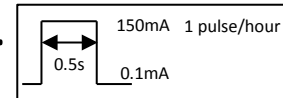
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- 1) Super small and slim battery realizes not only stylish designs but also high output.
- 2) A high-strength stainless exterior case provides excellent safety and reliability.
- 3) Rapid charging makes your portable devices more user-friendly.

# 1) Super small and slim, but high output

- ✓ Provides stylish designs for your products, as well as Bluetooth low energy, vibration and other functions which needs big discharging current.



## 2) High-strength stainless case, high safety and high reliability

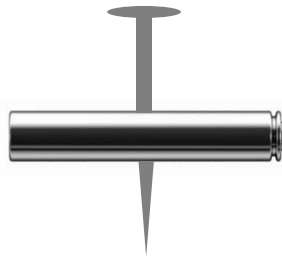
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- ✓ No swelling, no explosion, no fire.
- ✓ Certified by IEC62133/UL1642. (mass-produced models only)

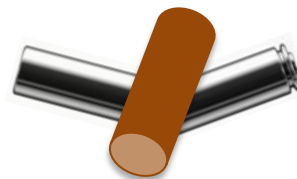
### Test example



Swelling check  
after 1,000 times cycle test



Nail penetration test

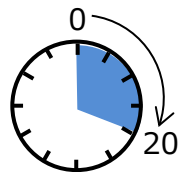


Impact test

### 3) Rapid charging, more user-friendly

- ✓ 3C charging realizes 80% charging in 20 minutes.(CG-425A/435A only)

20 min. charging



CG-425A

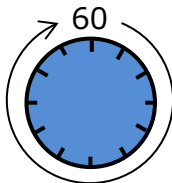
CG-435A

CG-320A

80% charged

25%  
charged

60 min. charging



CG-425A

CG-435A

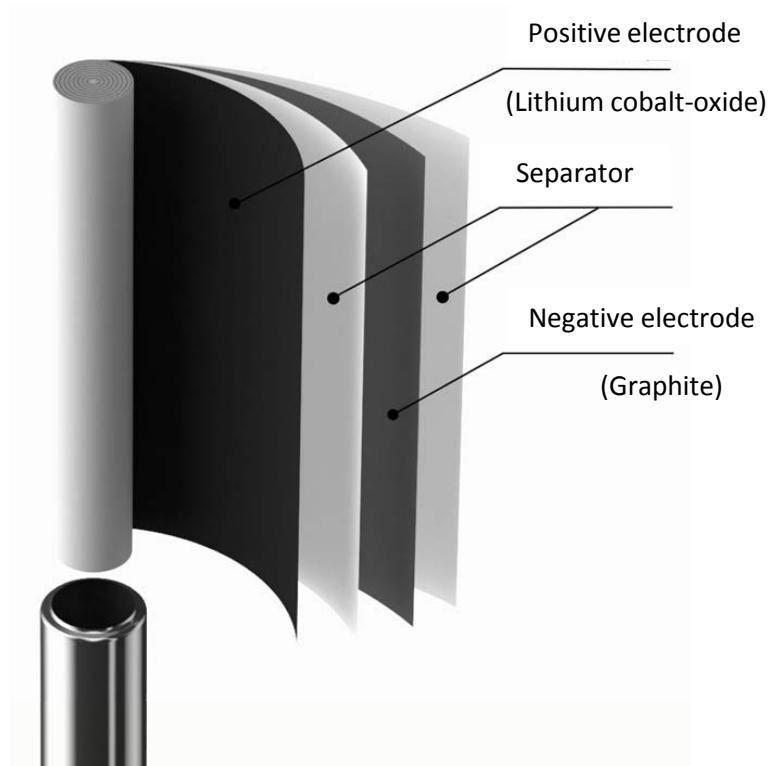
CG-320A

100% charged

75% charged

# Manufacturing technology

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- ✓ Highly skilled battery design technology
- ✓ Highly precise manufacturing technology
- ✓ Highly quality control

# Specification

As of September, 2018.

Part Number		CG-320A	CG-425A	CG-435A (Under Consideration)
Size*	Diameter(Max.)	3.65mm	4.7mm	4.7mm
	Height(Max.)	20mm	25mm	35mm
Weight* (Approx.)		0.5g	1.0g	1.5g
Typical Capacity		15mAh	32mAh	52mAh
Rated Capacity		15mAh	30mAh	48mAh
Nominal Voltage		3.8V		
Maximum Charging Voltage		4.35V		
Maximum Charging Current		11.2mA(0.75C)	90.0mA(3C)	144.0mA(3C)
Operating Temperature	Charge	0°C ~ 60°C		
	Discharge	-20°C ~ 60°C		
Certifications		IEC62133, UL1642		Not yet

\* Without tabs



# Pin-type Li-ion battery will make your product more attractive.

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## Key Benefits

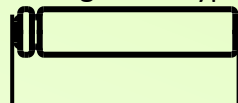
- ✓ Small & Slim
- ✓ Stylish design
- ✓ High safety & reliability
- ✓ Rapid charging
- ✓ Available for Bluetooth low energy, vibration and other functions
- ✓ Long product life time



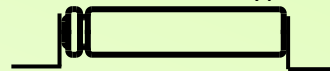
1. **Standard voltage range is 3.0 – 4.35V. Protection required for over-charge/over-discharge. Please prepare protection circuit on the customer side.**
2. **The battery will be shipped with tabs or lead wires.**  
**Please ask a Panasonic sales person when tab customization is needed.**

## Standard Terminal Types

Through-hole type



Surface mount type



All models have stainless steel tab with tin (Sn) plating.

3. **In order to prevent accidental ingestion of the battery, it must be inaccessible to the individual user / customer.**

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# Any Questions?

Please feel free to ask a Panasonic sales person.

Panasonic Pin-type Lithium-ion Battery

<https://industrial.panasonic.com/ww/products/batteries/secondary-batteries/pin-li-ion>